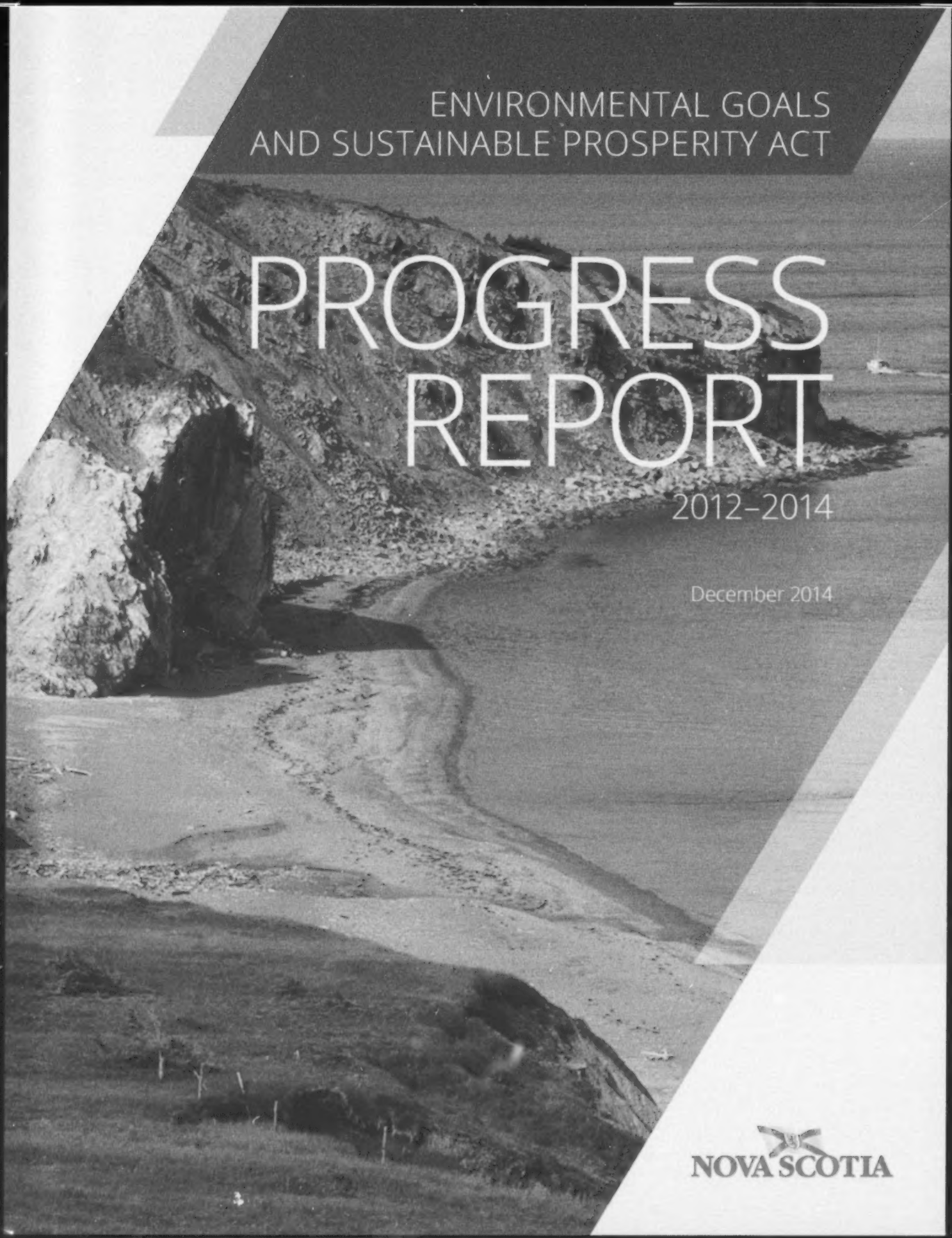

ENVIRONMENTAL GOALS
AND SUSTAINABLE PROSPERITY ACT

PROGRESS REPORT

2012–2014

December 2014

NOVA SCOTIA

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Executive Summary

of the 2012–2014 Progress Report of the Environmental Goals and Sustainable Prosperity Act

The 2012–2014 progress report provides highlights of the 2012 review of the Environmental Goals and Sustainable Prosperity Act (EGSPA, also referred to in this report as the act), establishes the status of the goals, and offers examples of key initiatives that move us toward sustainable prosperity.

2012 EGSPA REVIEW AND AMENDMENTS

The Round Table on Environment and Sustainable Prosperity conducted a five-year public review of the act in 2011–2012, with a report making recommendations going to the Minister on March 30, 2012. Amendments were grouped into categories related to (1) language and principles clarification, (2) horizontal governance, (3) reframing of objectives and key outcomes, (4) updating and implementation of current goals, and (5) the addition of four new goals. Included in the amendments to the foundation and principles were a whole systems approach, with all departments involved in meeting the commitments and vision, as well as a commitment to manage the environment and economy for the benefit of present and future generations, in keeping with the Mi'kmaw concept of Netukulimk — achieving adequate standards of community nutrition and economic well-being without jeopardizing the integrity, diversity, or productivity of our environment.

GOALS UPDATE AND EXAMPLES OF PROGRESS

The 25 goals are grouped under Cleaner Energy, Climate Change, Healthy Air and Water, Leadership in Sustainable Practices, Protection of Biodiversity, and Sustainable Management of Natural Assets. As of March 31, 2014, 12 goals had been achieved, and 13 are currently under way and still within final targets. Achieved goals are outlined in this report, to show what progress has been made and what outcomes maintained.

Significant movement was made on the four new goals added during the 2012 amendments — on a cleaner-energy framework, a green economy strategy, local food consumption, and local food production.

EXAMPLES OF PROGRESS MADE IN 2012–2014

- Cleaner Energy — renewable energy surpassed the goal of 18.5 per cent and reached 20 per cent
- Climate Change — greenhouse gas emissions continued on a declining trend
- Healthy Air and Water — lowered nitrogen oxide emissions surpassed the target set for 2015, and the third water strategy progress report was released in May 2014
- Leadership in Sustainable Practices — implementation of the sustainable procurement policy was ongoing; in 2013, the solid waste disposal rate was 376 kg/person
- Protection of Biodiversity — "Our Parks and Protected Areas: A Plan for Nova Scotia" was released in August 2013, which, once lands are designated, will allow government to reach the land protection goal under EGSPA of at least 12 per cent
- Sustainable Management of Natural Assets — new contaminated sites regulations became effective in July 2013; in August 2013, a progress report was released on the natural resources strategy adopted in 2010

SUSTAINABLE PROSPERITY INITIATIVES

Many initiatives are under way in our province to improve on the progress toward achieving our vision for sustainable prosperity. These initiatives either support or are in addition to the work done to achieve or maintain the identified goals. Some of these initiatives are new, while others are ongoing. Examples of the great work being done include initiatives in the areas of cleaner energy, agriculture, forestry, fisheries, municipalities, and clean technology.

MESSAGE FROM THE MINISTER

I am pleased to present the 2012–2014 progress report concerning the Environmental Goals and Sustainable Prosperity Act (EGSPA). The act is one of several pieces of legislation that guide our work at Nova Scotia Environment, with goals ranging from air emissions to protecting our lands.

This unique piece of legislation, established in 2007, recognizes the importance of integrating environmental sustainability and economic prosperity.

In 2012, the Minister's Round Table on the Environment and Sustainable Prosperity carried out the first five-year public review of EGSPA. The round table's consultation with key sectors and the public led to updates to some goals and the addition of four new goals to:

- support buying local food,
- increase the number of farms in the province,
- develop a green economy strategy, and
- design a sustainable energy framework.

Nova Scotia has achieved 12 of the 25 goals, while work continues on the others. Overall, the focus during the last two years has been on further improving and strengthening the linkages between the environment and the economy.

This progress report highlights our collaborative work with other government departments, agencies and stakeholders on some significant accomplishments.

Thank you to members of the round table for their ongoing commitment and work, especially during the last year in helping to develop Nova Scotia's proposed Greener Economy Strategy. Members have also provided valuable feedback on this progress report (see the letter at the back of this document) and made thoughtful recommendations for government's consideration.

We are listening. As resources allow, we will be looking to address the round table's suggestions, such as identifying better ways for evaluating and reporting progress on goals that link to current initiatives, how to integrate the economy

and environment at a local level, developing more aggressive goals for greenhouse gas emissions and how to monitor potential industrial developments.

The round table has provided many insights on the topic of energy. There is much work taking place through: the greener energy framework; installed and planned wind energy, solar energy and energy storage innovations; efficiency programs; sustainable transportation; natural gas development; and research and development.

Meanwhile, an electricity review is underway and has engaged Nova Scotians in how to address the challenges and opportunities in the electricity sector. The results will play a role in the development of our province's next electricity plan.

We will also work to better integrate environmental and economic prosperity and link our efforts with the Ivany Commission's recommendations and the province's proposed Greener Economy Strategy. The strategy's aim is to provide guidance and ways for "greening" our overall economy — beyond clean technology into a range of opportunities and better integration across sectors.

Regarding air quality, we believe the goals that meet and maintain the Canada-wide Standards for particulate matter and ground level ozone have been achieved. These standards were developed by the Canadian Council of Ministers of the Environment and applied nationally. The standards required reporting only in Statistics Canada census areas with a population of 100,000 or more, which is why we have only been reporting for Halifax and Sydney.

We have, however, been continuously monitoring in 10 locations across the province, such as at the North Mountain near the Annapolis Valley and Pictou, through Environment Canada. Although the populations in these areas are much lower than the areas required for EGSPA reporting, the measurements we have been taking from these locations have achieved the standard.

Beginning in 2015, a new system for reporting is being rolled out nationally under the Air Quality Management System. The new system includes reporting against four air zones that cover the entire Nova Scotia landmass, so both urban and rural areas of the province will be included. In addition, more stringent Canadian Ambient Air Quality Standards for particulate matter and ozone will replace the current standards and be the new metric reported for each air zone.

Regarding water quality, we all care about our water and want it to be well protected and properly used. The third Water Strategy Progress Report outlined progress on water strategy implementation in 2013-2014. The drinking water

strategy is now being renewed as well. In May 2014, the Office of the Auditor General (OAG) conducted an audit of NSE's drinking water program. We committed to and continue to implement the OAG's recommendations.

This progress report on EGSPA highlights some significant accomplishments, such as the release of "Our Parks and Protected Areas: A Plan for Nova Scotia," the implementation of the new contaminated sites regulations, and the increase of our renewable energy to 20 per cent, surpassing the target of 18.5 per cent by 2013.

These are accomplishments that we can be proud of; yet we have much work to do to meet our goals.

Thank you to all engaged Nova Scotians who are contributing to the province's success in meeting the EGSPA goals. And of course, thanks again to the Minister's Round Table on the Environment and Sustainable Prosperity, for your work, expert advice and commitment.

I urge all Nova Scotians to find ways to contribute to meeting our EGSPA goals — making our province one of the greenest and most sustainable places in the world.

Honourable Randy Delorey
Minister of Environment

INTRODUCTION

The Environmental Goals and Sustainable Prosperity Act (**http://www.novascotia.ca/nse/egspa/**) (EGSPA, also referred to as the act in this report) is a unique piece of legislation, the first in the country that recognizes the importance of integrating environmental sustainability and economic prosperity. The act sets out 25 goals and two overarching objectives aimed at achieving sustainable prosperity.

This report provides highlights of the past two years (2012–2013 and 2013–2014) that include an overview of the 2012 legislated review of the act and a summary of the progress made. The report includes an update on each individual goal, as well as highlights of other government initiatives that move us toward sustainable prosperity.

Starting in October 2011 and ending in March 2012, the Round Table on Environment and Sustainable Prosperity (**http://www.novascotia.ca/nse/dept/minister.roundtable.asp**) (the round table) carried out a review of the act and presented a report to the Minister of Environment in March 2012 on potential amendments and improvements.

HIGHLIGHTS

THE REVIEW

In 2011–2012, the round table carried out the first public review of the act, as requested by the Minister of Environment. The act requires a review every five years. It was passed in April 2007, proclaimed in June 2007, making the 2012 review the first five-year review.

With a focus on further improving and strengthening the linkages between the environment and the economy, the round table conducted the review, which included five public consultation sessions and a website that facilitated the submission of written feedback. Over 90 submissions were received.

The round table conducted the review within a six-month time frame and on March 30, 2012 submitted a report with recommendations to the Minister of Environment. Concurrent to the public review by the round table, Nova Scotia Environment (NSE) consulted with the Mi'kmaq and led an internal review.

Following receipt of the round table's report and recommendations, NSE, in collaboration with key government departments, reviewed and analyzed the report and recommendations, and amendments were proposed that can help to further grow the economy without compromising the environment. With the support of the round table, the proposed amendments to the act were tabled in the Nova Scotia Legislature by the Minister of Environment on November 19, 2012, passed unanimously on December 3, 2012, and received Royal Assent on December 6, 2012.

THE AMENDMENTS

Amendments to the act were based on the round table's recommendations and feedback from key departments and were grouped into five major categories, as follows:

1. amendments to clarify the language and principles that form the foundation of the act
2. amendments to increase the horizontal governance in implementation of the act

3. amendments to reframe the objectives and key outcomes of the act
4. amendments to update current goals to reflect continued focus, implementation, federal and/or other adopted standards, extension to the greater public sector, and alignment with updated regulations
5. amendments to add new goals that reflect new strategies and initiatives under way and that strengthen economic linkages

These amendments include the encouragement of a more integrated and horizontal approach to achieving environmental sustainability and economic prosperity, by increasing collaboration among government departments so that work being done in other departments, not currently captured in the previous reporting framework, can be included in reporting.

AMENDMENTS INCLUDED

Replacement of the previous two long-term objectives with the following:

- a new long-term objective to establish clear and progressive goals that foster environmental sustainability and economic well-being
- an objective that reflects an integrated and province-wide approach to achieving continuous improvement in social, economic, and environmental outcomes

New goals, to

- adopt and implement a framework on cleaner energy
- develop a strategy to advance the growth of the green economy
- support and encourage local food consumption
- support and encourage local food production

AMENDMENTS TO THE FOUNDATION AND PRINCIPLES OF THE ACT INCLUDED

- using a whole systems approach, whereby all departments would be involved in meeting the commitments and vision of the act
- managing the environment and economy for the benefit of present and future generations, in keeping with the Mi'kmaw concept of Netukulimk

THE GOALS WERE REORGANIZED UNDER THE CATEGORIES OF

- Cleaner Energy
- Climate Change
- Healthy Air and Water
- Leadership in Sustainable Practices
- Protection of Biodiversity
- Sustainable Management of Natural Assets

GOALS SUMMARY

As of March 31, 2014, 12 goals were achieved and 13 were works-in-progress. The latter included two goals with new targets, changing their status from achieved to works-in-progress, and the addition of four new goals.

Progress continues to be made in achieving the remaining goals. Here are some highlights:

- Renewable energy increased from 18.3 per cent in 2012 to 20 per cent in 2013, which means the target of 18.5 per cent by 2013 was surpassed. This indicates that we are well on our way to meeting the next target of 25 per cent by 2015.
- The lowering of nitrogen oxide emissions surpassed the target of 28 per cent below the 2000 emissions by 2015, reaching 36 per cent below the 2000 emissions in 2013.
- Sulphur dioxide emissions were at 52 per cent below the 1995–2005 emissions in 2012 (the latest available data), with a target of "58 per cent below emissions relative to the 1995–2005 emission allocation by 2015."

Note: The nitrogen oxide and sulphur dioxide goals had previously met their targets, but new, more ambitious targets were added during the 2012 amendments to the act.

- In August 2013, the province released the final Parks and Protected Areas plan, which, once lands are designated, will allow government to reach the land protection goal under EGSPA of at least 12 per cent.
- The new contaminated sites regulations became effective in July 2013.
- Significant progress was made toward the four new goals (a cleaner-energy framework, a green economy strategy, local food consumption, and local food production) added during the 2012 amendments.

Status and progress on the 25 goals begins on page 12.

OBJECTIVES

The act emphasizes the importance of integrating environmental sustainability and economic prosperity through the stipulated goals and a two-fold high-level objective. To track how we are doing in achieving this objective, a set of high-level indicators of prosperity has been developed. These indicators track trends over time in Nova Scotia and across Canada. More details on the indicators of prosperity are available in a separate report at **www.gov.ns.ca/nse/egspa/**.

4(1) The long-term environmental and economic objective of the Province is to achieve sustainable prosperity and to this end to:

4(1)(a) establish clear goals that foster an integrated approach to environmental sustainability and economic well-being; and

4(1)(b) work towards continuous improvement in measures of social, environmental and economic indicators of prosperity.

GOALS UPDATE

To achieve the long-term objective set forth in subsection one (1) of section four (4), the province has a total of twenty-five environmental and economic goals in the areas of Cleaner Energy, Climate Change, Healthy Air and Water, Leadership in Sustainable Practices, Protection of Biodiversity, and Sustainable Management of Natural Assets. These goals are listed below with a description and status for each.

Cleaner Energy

TAPPING INTO, AND CONSERVING, NATURE'S SOURCES OF ENERGY

GOAL (A)

The province adopts and implements a framework to support a transition to cleaner sources and sustainable uses of energy to produce greater economic, social and environmental benefits for Nova Scotians by supporting and enabling (i) energy efficiency and conservation to assist in energy affordability and competitiveness through increased productivity, (ii) sustainable transportation options, (iii) increased renewable energy, (iv) enhanced use of natural gas to displace oil and coal, and (v) enhanced innovation through globally competitive energy research and development.

GOAL IN PROGRESS

WHERE ARE WE NOW?

Work has been ongoing on the implementation of the province's framework to support a transition to cleaner energy sources and sustainable uses of energy in the five key areas outlined above in goal (a).

(i) In April 2014, the Government of Nova Scotia passed new legislation to restructure the way energy efficiency programming is delivered and funded

in the province. This new model will ensure that investments are made in ways that are more competitive, affordable, accountable, and sustainable. The province's Energy Efficiency Plan sets objectives that will save energy, lower costs, and reduce greenhouse gas emissions. A copy of the plan "Using Less Energy" can be found at **http://tinyurl.com/olrhojo**.

The Efficiency Nova Scotia Corporation (ENSC) continues to offer a variety of energy efficiency programs and services, including education, technical assistance, incentives on energy efficient products and upgrades, low-income assistance, the Mi'kmaq Energy Efficiency Program, development of new and innovative approaches, and financing options for homes or businesses to use energy better. To date, ENSC has helped over 150,000 program participants to reduce their energy consumption.

Since 2008, energy efficiency efforts in Nova Scotia have saved enough electricity to power about 63,000 homes and prevented close to 550,000 tonnes of carbon dioxide from entering the atmosphere. This is the equivalent of taking around 110,000 cars off the road.

Efficiency spending also has a significant impact on the economy. Nova Scotia's energy efficiency industry currently provides over 1,200 full-time jobs, with a total wage bill of over $62 million. These businesses annually contribute $192 million to Nova Scotia's economy.

(ii) In April 2013, the province launched "Choose How You Move: Sustainable Transportation Strategy," the first of its kind in Nova Scotia. A key piece of the strategy has been the Nova Scotia Moves grant program. Almost $2.5 million in grants to over 60 projects have been awarded through this program and two rounds of applications (2012–2013 and 2013–2014) have already been completed. Current activity includes partnering with Dalhousie University on a transportation data centre, and moving forward with implementing the Blue Route, a provincial bicycle network.

(iii) In 2007 when EGSPA was passed, renewable energy accounted for 10 per cent of the Nova Scotia electricity fuel mix. By 2012, that number had increased to 18.3 per cent, and in 2013 we used renewable energy to generate 20 per cent of the province's electricity. Regulatory approvals were given in 2013 for the Lower Churchill Project and its associated Maritime Link Project. The Maritime Link will enable achievement of the goal of 40 per cent renewable energy by 2020, broaden renewable electricity options for Nova Scotia, and contribute to longer-term stable electricity prices.

(iv) The province, key stakeholders, and industry have been working together to facilitate the use of natural gas in Nova Scotia. Natural gas burns cleaner than oil or coal and produces fewer greenhouse gases and other harmful emissions. EnCana's Deep Panuke project commenced natural gas production in 2013. Depending on field performance, the project may be in production for 12 to 15 years. Over the life of the project, Deep Panuke is expected to produce up to 800 billion cubic feet of natural gas.

In 2013, in addition to achieving the commencement of production from Deep Panuke, the province and partners

- developed policy framework for compressed natural gas distribution, including facilities regulation by the Utility and Review Board, to be followed by amendments to the Gas Distribution Act in 2014
- commissioned a study to examine natural gas pipeline infrastructure and options to ensure access to competitively priced natural gas, as local demand continues to grow and domestic production declines
- created a new standard for natural gas conversion whereby residential and commercial customers could reduce the cost of converting to natural gas by allowing conversion kits
- assisted the extension of the natural gas pipeline into Pictou County
- examined opportunities to bring energy savings to public institutions such as St. Francis Xavier University and St. Martha's Regional Hospital, both located in Antigonish, through a switch to natural gas distribution

(v) The province has demonstrated a commitment to enhanced innovation through globally competitive energy research and development, by

- developing a regulatory framework for developmental in-stream tidal Feed-in Tariff (FIT) Program
- signing a Memorandum of Understanding with the Nova Scotia Offshore Energy Research Association and the United Kingdom's Technology Strategy Board, to fund innovative research projects that will increase our understanding of high flow tidal environments
- supporting research efforts through funding by the Offshore Research Energy Association (OERA)
- supporting the Fundy Ocean Research Centre for Energy (which is building the Fundy Advanced Sensor Technology Platform) and the Acadia University-led research project, Natural Resources Canada's ecoENERGY

Innovation Initiative — projects that increase our understanding of the power of the Fundy tides

- working in partnership with OERA, which hosted biannual research and development forums in 2012 and 2014

WHAT'S NEXT?

The province will

- support energy efficiency and conservation
- continue implementation of the Blue Route (a provincial bicycle network), run the third round of Nova Scotia Moves grant program, and continue with ongoing policy development
- work to meet renewable electricity targets
- continue exploration of regional natural gas market challenges and opportunities through the Atlantic Energy Gateway project
- work toward continued access to competitively priced natural gas by working with stakeholders
- take advantage of the strategic opportunity for tidal industry investments in Nova Scotia due to significant industry interest
- host the Nova Scotia Energy Research and Development Conference, and welcome the fifth International Conference on Ocean Energy (ICOE)
- develop Marine Renewable Energy legislation and an integrated licensing system to oversee industrial development

GOAL (B)

Of the total electricity needs of the Province, (i) 18.5 per cent is obtained from renewable energy sources by 2013, (ii) 25 per cent is obtained from renewable energy sources by 2015, and (iii) 40 per cent is obtained from renewable energy sources by 2020.

GOAL IN PROGRESS

WHERE ARE WE NOW?

Nova Scotia Power Incorporated (NSPI) is on track to meeting and exceeding the renewable electricity targets. Renewable electricity increased to 20 per cent in 2013, up from 18.3 per cent in 2012. This means that the 2013 target of 18.5 per cent has been surpassed.

As mentioned in goal (a) (iii) above, regulatory approvals were given in 2013 for the Lower Churchill Project and its associated Maritime Link Project, which will enable achievement of the goal of 40 per cent renewable electricity by 2020.

WHAT'S NEXT?

The province will continue to develop, research, and invest in renewable energy.

GOAL (C)

An updated energy efficiency rating system for new and existing homes is available in the Nova Scotia Building Code Regulations made under the Building Code Act.

GOAL ACHIEVED

WHERE ARE WE NOW?

On December 31, 2009, the Nova Scotia Building Code adopted energy efficiency requirements for all houses and small buildings. On December 31, 2013, new provisions of the National Building Code of Canada for energy efficiency of houses and small buildings were adopted into the Nova Scotia Building Code. These requirements apply to renovations and new single-family homes and small buildings built under Part 9 of the National Building Code.

WHAT'S NEXT?

Natural Resources Canada is planning a new energy rating system for public review. In addition, Natural Resources Canada has introduced the new ENERGY STAR label for New Homes, which promotes new homes that are more energy efficient than those built to minimum building codes.

GOAL (D)

All new residential dwelling units constructed in the Province after January 1, 2011 are required to meet energy conservation measures adopted in the Nova Scotia Building Code Regulations made under the Building Code Act.

GOAL ACHIEVED

WHERE ARE WE NOW?

Energy efficiency amendments were made to the Building Code Act in December 2009. These exceed the EGSPA target and apply to new home construction, home additions, and major renovations, as well as commercial buildings under 600 square metres. All manufactured housing products meet or exceed the energy conservation measures.

On December 31, 2013, government adopted amendments to the National Building Code of Canada that include energy efficiency requirements for all houses and small buildings. These will benefit all manufacturers, material suppliers, designers, builders, and owners by moving to uniform national standards for energy efficiency in the design and construction of new, existing homes (and the renovation thereof) and small buildings.

WHAT'S NEXT?

Government adopted the National Energy Code for Buildings, which applies similar standards for energy efficiency in all large buildings not previously addressed by EGSPA or the Building Code. The National Energy Code for Buildings was adopted into law on December 31, 2013 and comes into force on December 31, 2014.

It is anticipated that updates to both the National Building Code 2015 and the National Energy Code for Buildings 2015 will include amendments improving the energy conservation measures. Amendments to the National Building Code and National Energy Code for Buildings are expected to undergo a public review in Nova Scotia in 2016.

There is a commitment to seek a 15 per cent improvement in energy conservation over the standards of both the 2015 National Building Code and the 2015 National Energy Code for Buildings in the 2020 edition.

GOAL (E)

The Province continues to work with other levels of government on national emission standards for greenhouse gases and air pollutants from new motor vehicles, such as the standards adopted by the State of California.

GOAL ACHIEVED

WHERE ARE WE NOW?

The Greenhouse Gas (GHG) commitment for motor vehicles has been met through federal regulations. The federal government's proposed sustainable development strategy, released in March 2010, states they will continue to develop and implement air pollutant emission regulations for various classes of on-road vehicles.

WHAT'S NEXT?

The province will continue to work with federal, provincial, and territorial counterparts on a national standard for GHG and air pollutant emissions.

CLIMATE CHANGE

ADAPTING TO AND MITIGATING THE IMPACT OF CLIMATE CHANGE

GOAL (F)

GHGs are, by 2020, at least 10 per cent below the levels that were emitted in the year 1990, as outlined in the New England Governors and Eastern Canadian Premiers Climate Change Action Plan 2001.

GOAL IN PROGRESS

WHERE ARE WE NOW?

Nova Scotia's greenhouse gas emissions output in 2011 is estimated to have been 20.7 M tonnes, and 19.0 M tonnes for 2012. This means that both our GHG intensity and total GHG emissions continue a declining trend since 2007, the year EGSPA was enacted. In that year our GHG output was 21.9 M tonnes.

Our GHG output declined 18.5 per cent between 2007 and 2012, almost half of the reduction needed to reach our 2020 target of no more than 17.2 M tonnes. Progress in our GHG output has been due to several factors, including an increase in switching from coal and oil to natural gas by the electricity sector and government policies that increase renewable energy and energy efficiency.

Also, in 2012 the reduction was partly due to shutdowns at two paper mills. One mill has since returned to production; therefore, overall GHG output in the 2014–2015 EGSPA report (which will consist of 2013 GHG data) may be slightly greater than the 2012 results.

WHAT'S NEXT?

Government will continue its work in reducing GHGs by meeting renewable energy and energy efficiency targets. Actions include the GHG electricity regulation, the renewable energy standard regulation, pursuit of energy efficiency standards for all new construction, and the reduction of emissions from transportation.

HEALTHY AIR AND WATER

DOING OUR PART TO IMPROVE THE AIR WE BREATHE AND TO RESTORE AND MANAGE OUR PRECIOUS WATER RESOURCES

GOAL (G)

Emissions of nitrogen oxides are reduced by (i) 20 per cent by 2009, (ii) 28 per cent by 2015, and (iii) 44 per cent by 2020, relative to emissions in 2000.

GOAL IN PROGRESS

WHERE ARE WE NOW?

The target has been achieved for 2009. More ambitious reductions were added to the Air Quality Regulations for 2015 and 2020, and were subsequently added to EGSPA through the 2012 amendments. The nitrogen oxide (NO_x) emissions reported for 2012 and 2013 met and surpassed the reduction target for 2015 at 15,640 tonnes and 16,998 tonnes, respectively, or 41 and 36 per cent below NO_x emissions in 2000.

WHAT'S NEXT?

The province will continue to work with NSPI (a significant emitter) to ensure the target continues to be met. The province will also continue to participate in national efforts to establish emission requirements for the electricity sector.

GOAL (H)

Sulphur dioxide emissions are reduced by (i) 50 per cent by 2010, (ii) 58 per cent by 2015, and (iii) 75 per cent by 2020, relative to the 1995-2005 emission allocation.

GOAL IN PROGRESS

WHERE ARE WE NOW?

The target has been met for 2010. More ambitious reductions were added to the Air Quality Regulations for 2015 and 2020, and subsequently added to EGSPA through the 2012 amendments. Sulphur dioxide (SO_2) emissions for 2012 were 70,538 tonnes, or 52 per cent below emissions relative to the 1995–2005 emission allocation. SO_2 emissions for 2013 will be available in the spring of 2015 from the National Pollutant Release Inventory (NPRI).

WHAT'S NEXT?

The province will continue to work with large emitters, including NSPI, to ensure they remain within their SO_2 limit, and will continue to participate in national work to establish emission requirements for the electricity sector.

GOAL (I)

Mercury emissions are reduced to no more than (i) 110 kilograms by 2010, (ii) 100 kilograms by 2011, (iii) 85 kilograms by 2013, (iv) 65 kilograms by 2014, and (v) 35 kilograms by 2020.

GOAL IN PROGRESS

WHERE ARE WE NOW?

On December 9, 2010, the province announced that it would amend the Air Quality Regulations to defer the 2010 emission target of 65 kg until 2014 to limit the impact on power costs. Regulated emission levels will continue to decline from 2010 to 2013, and NSPI will be required to make additional emission reductions by 2020 to offset any emissions over 65 kg in the 2010–2013 period. NSPI will be required to meet a 35 kg target in 2020. Mercury emissions for 2012 were 93.9 kg and for 2013 were 72.52 kg, both of which were below the permitted limits of 100 kg and 85 kg, respectively.

WHAT'S NEXT?

The province will continue to work with NSPI to reduce its mercury emissions.

GOAL (J)

The Province meets and maintains the Canada Wide Standards for Particulate Matter (PM) and Ozone established by the Canadian Council of Ministers of the Environment for airborne fine-particulate matter by 2010.

GOAL ACHIEVED

WHERE ARE WE NOW?

The Canada-wide standard for airborne fine-particulate matter $PM_{2.5}$ (airborne particles that are 2.5 microns or less in diameter) has consistently been met in the Halifax Regional Municipality (HRM). While it is thought that the Cape Breton Regional Municipality (CBRM) was also meeting the standard, results could not be calculated prior to 2012 due to insufficient data. HRM's $PM_{2.5}$ was 15.2 µg/m³ (micrograms per cubic metre) in 2010–2012 and 14.2 µg/m³ in 2011–2013, while that for CBRM was 11.4 µg/m³ in 2010–2012. The 2011–2013, $PM_{2.5}$ data for CBRM is 13.1 µg/m³. The target for each is 30 µg/m³ or less.

WHAT'S NEXT?

The province will continue to implement its Canada-wide standard implementation plan and work with national committees for continuous improvement in monitoring.

GOAL (K)

The Province meets and maintains the Canada Wide Standards for Particulate Matter (PM) and Ozone established by the Canadian Council of Ministers of the Environment for ground-level ozone by 2010.

GOAL ACHIEVED

WHERE ARE WE NOW?

The Canada-wide standard for ground-level ozone is consistently being met for both the Halifax Regional Municipality (HRM) and the Cape Breton Regional Municipality (CBRM). HRM's ground-level ozone was 50 parts per billion (ppb) for 2010–2012 and 52 ppb for 2011–2013, while that for CBRM was 49 ppb in both 2010–2012 and 2011–2013. The target for each is 65 ppb or less.

WHAT'S NEXT?

The province will continue to implement its Canada-wide standard implementation plan.

GOAL (L)

Municipal public drinking-water supplies meet the Province's 2012 treatment standards by 2020.

GOAL IN PROGRESS

WHERE ARE WE NOW?

At the end of March 2014, 90 per cent of the municipal public drinking water supplies met the treatment standards. Ninety-eight per cent of the population served by municipalities has access to water that meet our standards.

WHAT'S NEXT?

The province will continue to assist municipalities to obtain the necessary funding to make upgrades, work with municipalities to develop drinking water treatment compliance strategies, and conduct regular audits of public drinking water supplies to ensure that standards are met.

GOAL (M)

A comprehensive water-resource management strategy is developed by 2010 and implemented accordingly.

GOAL ACHIEVED

WHERE ARE WE NOW?

The third Water Strategy Progress Report (available at **http://www.novascotia.ca/nse/water.strategy/resources.asp**) was released in May 2014 and outlined progress on water strategy implementation in 2013–2014.

Achievements included publishing a provincial atlas in March 2014 of the status of watershed health in Nova Scotia (the Nova Scotia Watershed Assessment Program), expanding the Nova Scotia Groundwater Observation Well Network by two wells, supporting the June 2013 Stormwater Innovation: Management and Solutions workshop, and providing in-kind and financial support to the

Community University Research Alliance H_2O (CURA H_2O) at Saint Mary's University, which launched an online data repository for all groups that are collecting water quality information under the WET-PRO project.

WHAT'S NEXT?

The province will continue to meet with the external-to-government Nova Scotia Water Advisory Group and work with all departments through the Water Strategy Implementation Committee, collaboration teams, and all levels of government on water strategy implementation.

GOAL (N)

Wastewater treatment facility discharges undergo at least primary treatment by 2020.

GOAL IN PROGRESS

WHERE ARE WE NOW?

As of March 31, 2014, 93 per cent of municipal wastewater facilities met the target. This is an increase from 2013. The achievement date of this goal was revised from 2017 to 2020 through the EGSPA 2012 amendments. This new date aligns with the new federal wastewater regulations published in June 2012.

WHAT'S NEXT?

Government will continue to work with municipalities on implementing the Canada-wide Municipal Wastewater Effluent Strategy and is developing a provincial wastewater standard that will include the objectives of the strategy.

LEADERSHIP IN SUSTAINABLE PRACTICES

LEADING THE WAY TOWARD A SUSTAINABLE FUTURE

GOAL (O)

The solid-waste disposal rate is no greater than 300 kilograms per person per year by 2015 through measures that include the development of new programs and product stewardship regulations.

GOAL IN PROGRESS

WHERE ARE WE NOW?

In 2013, Nova Scotia's disposal rate was 376 kg/person. According to Statistics Canada (2010), Nova Scotia's disposal rate is almost 50 per cent lower than the Canadian average, and the province's diversion rate is 70 per cent higher than the Canadian average. Currently, 17 materials are banned from disposal in Nova Scotia, and 8 product stewardship agreements are in place.

WHAT'S NEXT?

The province will continue to research options and alternatives to minimize waste disposal and diversion costs in consultation with key stakeholders. Consultations on proposed regulatory amendments to the solid waste regulations were held in May and June 2014. The proposed amendments contain measures to enhance the sustainability of the solid waste system and to further increase diversion rates within the province.

GOAL (P)

Septage treatment facilities are operated in accordance with the Guidelines for the Handling, Treatment and Disposal of Septage as of 2011.

GOAL ACHIEVED

WHERE ARE WE NOW?

Since December 2011, all septage treatment facilities operating in the province have been in compliance with the guidelines. In 2012, 19 of the 20 facilities obtained a ten-year approval, and one facility obtained a five-year approval. Seven facilities are closed or in the process of closing.

WHAT'S NEXT?

The province will continue to monitor facilities to ensure that they meet the guidelines. Any required enforcement action will be undertaken as per the compliance model.

GOAL (Q)

A Sustainable Procurement Policy for the Province is developed and adopted by 2009 and implemented accordingly, including integrating sustainable procurement criteria into provincial government purchasing and promoting adoption of this approach to the greater public sector in the Province.

GOAL ACHIEVED

WHERE ARE WE NOW?

The Sustainable Procurement Policy was released in August 2009. Implementation is ongoing. A Sustainable Procurement page for government purchasers has been established on the government's Procurement Services website, and information for vendors has been added to the Tenders page. To date, sustainable procurement criteria have been added to the requests for standing offer(s) for over 10 standing offer categories.

WHAT'S NEXT?

Additional resources will be added to the site as they become available. Also, the province will continue to deliver sustainable procurement awareness sessions and sustainable business sessions for a wide variety of audiences in government, the greater public sector, and the vendor community. This includes classroom-based, online, and webinar-based delivery sessions, as well as trade fairs.

GOAL (R)

A government facility is constructed as a demonstration facility in accordance with leading energy efficient design standards by 2015 and used to foster sustainable building practices.

GOAL ACHIEVED

WHERE ARE WE NOW?

Government partnered with the Nova Scotia Community College (NSCC) to construct the Centre for the Built Environment, which opened in 2010 at the Waterfront Campus in Dartmouth. The project received LEED Gold status in August 2012. NSCC has adopted the concept of sustainable building and constructing to LEED standards on other projects since this building was constructed.

The province has adopted, where appropriate, LEED standards for new school construction and government buildings. Kings County Academy in Kentville is the first new school in Nova Scotia to receive LEED Gold certification. Also, the NSCC Marconi Campus addition in Sydney achieved silver certification.

WHAT'S NEXT?

Other buildings targeting LEED Gold are the Yarmouth Memorial Consolidated High School, the Medical Examiners Facility in Burnside, the C.P. Allen High School in Bedford, the Bluenose Academy in Lunenburg, the Lunenburg South Queens Middle School in Liverpool, the New Glasgow P-9 School, and the West Highlands Elementary School in Amherst.

The demonstration facility will continue to be used to foster sustainable building practices.

GOAL (S)

The Province develops a strategy by 2014 to advance the growth of the green economy, and implements the strategy accordingly.

GOAL IN PROGRESS

WHERE ARE WE NOW?

Following the addition of this new goal to EGSPA, work began early in 2013 to develop the foundation of the strategy. A partnership was formed between NSE and Economic and Rural Development and Tourism (ERDT) to lead the strategy's development. This reflects the integration of the environment and economy inherent in EGSPA.

To ensure an interdepartmental approach, an Advisory Committee was formed to provide senior-level direction and insight. As well, an interdepartmental Working Group provided focused input to the strategy and helped ensure that the many relevant initiatives already under way were identified. Research was completed by drawing on leading sources and included a jurisdictional review, proposed definitions, and other elements. A key deliverable of this process was a draft Greener Economy Strategy document.

WHAT'S NEXT?

The focus of the current phase in the strategy development process is to consult external stakeholders. Efforts will build on the findings of the draft document. The overarching objective will be to further refine and focus the unique opportunities for Nova Scotia in the evolving green economy. To do so, the lead departments will work closely with the Minister's Round Table on Environment and Sustainable Prosperity. Round table members can draw on their specialized knowledge, and that of local and international experts, to understand how best to advance Nova Scotia's position in the green economy.

GOAL (T)

Local food consumption is supported and encouraged, with the goal of 20 per cent of the money spent on food by Nova Scotians being spent on locally produced food by 2020.

GOAL IN PROGRESS

WHERE ARE WE NOW?

Increasingly, Nova Scotians are seeing the value of locally produced foods for their nutritional benefits, superior freshness, trusted food safety standards, environmentally friendly production practices, and for the economic benefits to the local economy. Being produced locally provides a point of differentiation in the marketplace, and, thanks to the marketing efforts of programs like Select Nova Scotia, awareness of buying local food increased to 33 per cent in

2012. This has contributed to a thriving farm direct marketing industry, and it strengthens the competitive position of locally produced foods in supermarkets, where most consumer food purchases are made.

There are two key statistics that are considered in determining the measurement for this goal: (1) the value of food produced on Nova Scotia farms in terms of farm cash receipts, and (2) the value of food expenditures by Nova Scotia households (excluding seafood purchases). The proxy measure for this goal is the per cent value of farm cash receipts to food expenditures in Nova Scotia. In 2011, the benchmark year, the percentage of money spent by Nova Scotians on locally produced food was 13. Since inception, this measure rose to 14 per cent in 2012 and 15 per cent in 2013.

WHAT'S NEXT?

One of the agriculture industry's most important customers is right here at home — Nova Scotians. Government has focused resources and implemented programs to increase the public's recognition of the value of supporting local farms. The province will continue this commitment through existing programming and measuring the impact of the Department of Agriculture's investment toward achieving this goal.

Some examples of initiatives that support agriculture awareness and expanding the market responsiveness of the industry include Select Nova Scotia, Taste of Nova Scotia, and a variety of agricultural awareness programs, such as Open Farm Day, Meet Your Farmer at the Mall, and Farmer for a Day.

GOAL (U)

Local food production is supported and encouraged, with the goal of increasing the number of local farms by five per cent by 2020.

GOAL IN PROGRESS

WHERE ARE WE NOW?

The vision of growing an agriculture industry that is diversified, market-focused, innovative, and profitable will improve the social well-being and quality of life for all Nova Scotians. Diversified and profitable agri-businesses bring economic stability, jobs, and public-sector investment in critical infrastructure to rural communities. A market-focused and innovative industry is responsive to emerging opportunities and drives the future growth of the industry, as well as establishes the foundation for newly created support industries.

Two sources of data are being used to measure the progress toward this goal: (1) the number of local farms having Nova Scotia farm registration, relative to the number of local farms registered in 2012, and (2) the Census of Agriculture data, which is provided every five years relative to 2011.

The farm registration data, derived voluntarily, will be used to measure the progress toward this goal on an annual basis. In 2012, the benchmark year for farm registration data, there were 2,606 farms registered in Nova Scotia. There was a drop in the number of farms registered in 2013, with 2,572 farms currently registered in the province.

Census of Agriculture data, derived from both registered and non-registered farms, will provide a source of data that can be used to measure progress toward this goal at the halfway point (2016) for all farms operating in the province, not just the registered farms. In 2011, the benchmark year for Census of Agriculture data, there were 3,905 farms operating in the province.

WHAT'S NEXT?

The goal of increasing the number of local farms must be based on a foundation of sustainability. The vision of growing an industry that is diversified, market-focused, innovative, and profitable is supported through government investment that is strategic. Therefore, the province will continue to implement Growing Forward II and existing programming, with a focus on providing increased support to new entrants, on improving business skills development initiatives, on risk management programming, and on expanding the innovative capacity of the industry.

Key initiatives implemented in 2012–2013 to help achieve this goal include ThinkFARM and FarmNext, in support of new entrants to the industry, the creation of Perennia Food and Agriculture Inc, and a new five-year, $37-million, Agriculture and Agri-Food Policy Framework that will provide a suite of programming under Growing Forward II.

PROTECTION OF BIODIVERSITY

PROTECTING OUR MOST VALUABLE ASSETS

GOAL (V)

At least 12 per cent of the total land mass of the Province is legally protected by 2015.

GOAL IN PROGRESS

WHERE ARE WE NOW?

In 2012, this goal was revised to "at least" 12 per cent through the 2012 EGSPA amendments. As of March 31, 2014, 9.32 per cent (or 514,980 hectares) of the province was legally protected.

On February 28, 2013, government released a proposed parks and protected areas plan for province-wide public consultation, which ended on May 1, 2013. On August 1, 2013, the province released "Our Parks and Protected Areas: A Plan for Nova Scotia," identifying specific goals for an integrated parks and protected areas system, which once lands are designated, will allow government to reach the land protection goal under EGSPA.

Protecting these areas provides such benefits as helping to conserve Nova Scotia's biodiversity, including wildlife species at risk. It increases opportunities for rural economic development through nature-based recreation and the attraction of visitors. It protects access to clean air and water, including drinking-water supply watersheds, and it fosters continued cooperation with Nova Scotia Mi'kmaq in the use and management of parks and protected areas.

WHAT'S NEXT?

The province will finalize site-specific planning and surveys to advance lands for legal designation under appropriate protection legislation.

SUSTAINABLE MANAGEMENT OF NATURAL ASSETS

BUILDING OUR ECONOMY BY RENEWING AND PROTECTING OUR LAND

GOAL (W)

Regulatory tools that use the framework within the Environment Act to stimulate redevelopment of contaminated land and contribute to economic development while protecting the environment are brought into effect by 2013 and implemented accordingly.

GOAL ACHIEVED

WHERE ARE WE NOW?

The Contaminated Sites Regulations were approved and released in March 2012. These regulations became effective July 6, 2013, following program development, including supporting documentation, seven protocols, and training, and are now being implemented. Among the provinces that have Contaminated Sites Regulations, Nova Scotia has the most comprehensive to date.

WHAT'S NEXT?

The government will monitor program implementation and further develop guidance documents, outreach or educational tools, and an overall program evaluation process, as well as conduct additional training internally with NSE staff and externally with accredited site professionals.

GOAL (X)

A policy of preventing net loss of wetlands is established by 2009 and implemented accordingly.

GOAL ACHIEVED

WHERE ARE WE NOW?

The Wetlands Conservation Policy was released on October 14, 2011. A Wetlands Conservation Policy Implementation Review is under way to review progress to

date. A Wetland Functional Assessment Training Workshop was held for wetland professionals in August 2013. For more information see **www.novascotia.ca/nse/wetland/education.asp**.

Public education about the policy and the new approach to wetland approvals is being provided through numerous public presentations and through continuously updated content on the NSE wetland web pages (**www.novascotia.ca/nse/wetland/**).

WHAT'S NEXT?

Continue implementation of the policy.

GOAL (Y)

The Province adopts a natural resources strategy by 2010, focusing on the areas of biodiversity, forestry, geological resources and parks, and implements the strategy accordingly.

GOAL ACHIEVED

WHERE ARE WE NOW?

"The Path We Share, A Natural Resources Strategy for Nova Scotia 2011–2020" was released on August 16, 2011. In August 2013, the Department of Natural Resources released a 24-month progress report. This report detailed the progress of the 32 actions outlined in the action plan document, "From Strategy to Action." Of the 32 actions in the action plan, 8 were complete, 20 were on schedule, and 4 had due dates revised. There are other longer-term actions in the strategy that will be worked on and implemented over the period for the strategy. They are linked to the 32 actions in the "24-month Progress Report" and are at various stages of implementation.

WHAT'S NEXT?

The province will continue to implement the strategy and will follow-through with, and monitor, ongoing actions. It will, in addition, implement actions yet to be started.

Moving Toward Sustainable Prosperity

In 2007, EGSPA was established with the vision to fully integrate environmental sustainability and economic prosperity. To strengthen and improve the progress of this vision, the first five-year review of the act focused on better integration of the environment and the economy. The key amendments have been outlined in this report. One of the key amendments is the shift in reporting to better reflect the sustainable prosperity initiatives happening in our province. Here are some highlights of key initiatives underway that create jobs and improve our economic performance while increasing our environmental sustainability.

Community Based Feed-in Tariff (COMFIT)

The Nova Scotia Community Feed-in Tariff (COMFIT) program, launched in 2011 (**http://energy.novascotia.ca/renewables/programs-and-projects/comfit**), is designed to help small-scale energy producers (who ordinarily can't compete against larger developers) to carry out their projects. COMFIT encourages community-based, local renewable energy projects by guaranteeing a rate per kilowatt-hour for the energy the project feeds into the province's distribution electrical grid. Through COMFIT, these smaller producers will be able to supply renewable energy to their specific community. Eligible entities include co-operatives, Mi'kmaw band councils, municipalities or their wholly owned subsidiaries, not-for-profit organizations, universities, combined heat and power biomass facilities, and Community Economic Development Investment Funds.

POTENTIAL BENEFITS:

- improves diversity of our renewable electricity supply
- lessens reliance on imported fossil fuels
- reduces our greenhouse gas emissions (GHGs)

- fosters local technological innovation and development, promoting community development, improving air quality, and putting Nova Scotia in a position of global leadership
- engages a geographically diverse range of local community participants in the development of renewable energy

Maritime Link Project

The Maritime Link will connect Nova Scotia to Newfoundland and Labrador's vast hydroelectric supply by overland and subsea transmission. Nova Scotia has taken steps to ensure that ratepayers benefit from the federal loan guarantee and that the legislative framework is in place for the UARB's review of the Maritime Link.

POTENTIAL BENEFITS:

- provides a renewable and reliable source of energy for the next 35 years
- places Nova Scotia in an energy loop, creating improved diversity and security of energy supply and improved regional grid reliability
- enables greater regional co-operation and enhances opportunities for competition in the marketplace
- achieves environmental and clean energy targets

Renewable Electricity Plan

The 2010 Renewable Electricity Plan is designed to move Nova Scotians away from carbon-based electricity toward greener, more local sources. Nova Scotia surpassed the 2013 EGSPA goal of 18.5 per cent renewable electricity, using renewable energy to produce 20 per cent of the province's electricity needs that year, and is on track to meet 25 per cent by 2015 and 40 per cent by 2020.

POTENTIAL BENEFITS:

- improves the diversity of our renewable electricity supply
- improves our energy security
- moves toward more stable electricity prices

Tidal Feed-in Tariff Program

The province has established the Developmental Tidal Feed-in Tariff Program to attract and encourage the early development of large-scale tidal energy devices. The program is designed to provide developers with a price per megawatt hour for the electricity produced from the testing and demonstration of their devices.

POTENTIAL BENEFITS:

- Nova Scotia is positioned to capture a leadership position in the supply and service sector of this emerging global industry and attract significant international investment.
- The Fundy Ocean Research Centre for Energy site in the Bay of Fundy is the first site in the world where tidal arrays (multiple turbines located in one site) will be tested and deployed. This represents a strategic leadership opportunity.

Energy Efficiency and Conservation

The province has continued to support and invest in energy efficiency and conservation through Efficiency Nova Scotia (ENSC).

POTENTIAL BENEFITS:

- Energy not used is the cheapest form of energy and without energy efficiency initiatives, Nova Scotia would have to generate 5.5 per cent more electricity, at a much higher delivered cost (based on ENSC's annual reporting). All ratepayers benefit when we reduce our consumption of those costly resources, not just those who participate in ENSC's programs and services.
- Energy efficiency is improving the competitiveness of Nova Scotia businesses, creating jobs, and helping families and businesses save money. It is also an industry that is growing, at more than five times the rate of our economy overall.

Sustainable Transportation

In April 2013, the province launched "Choose how you move: Sustainable Transportation Strategy," a commitment from the 2009 Climate Change Action Plan. Transportation accounts for 25 per cent of Nova Scotia's greenhouse gas emissions. The strategy equally addresses issues of health, affordability, community vitality, economic development, and accessibility.

POTENTIAL BENEFITS:

- The province has now awarded almost $2.5 million in grants to over 60 projects through the Nova Scotia Moves grant program, which has already completed two rounds of applications, for 2012–2013 and 2013–2014. Grant recipients are well-distributed across the province, from Yarmouth to Cape Breton.
- The grant program, in partnership with community organizations, supports tangible projects, helps activate local networks, and supports the building of community capacity.
- Provincial policy development aims to better coordinate mandates of different provincial government departments to more effectively meet sustainable transportation goals.

Perennia Food and Agriculture Inc

The province supported the merger of three provincial bodies — AgraPoint, the Atlantic Bioventure Centre, and AgriTECH Park — to enhance and better coordinate services to agri-food and bio-resource companies in production, quality and food safety, bioventures, and new product development. This merger became known as Perennia Food and Agriculture Inc.

POTENTIAL BENEFITS:

- addresses production and business management issues on farms
- creates internationally recognized quality and food safety programs
- provides leased incubation space for new product development
- conducts research to produce high-value products

Growing Forward II

This five-year, federally and provincially funded initiative provides flexible, innovative programming for Nova Scotia's producers, to ensure that the industry has the tools available to remain innovative and competitive.

POTENTIAL BENEFITS:

- provides financial support for innovation, building sustainable production and processing capacity, and capturing new market opportunities throughout the agri-business value chain

FarmNext

The FarmNEXT program supports new farms and beginning farmers by reducing borrowing costs and easing the financial burden for farmers just starting out.

POTENTIAL BENEFITS:

- makes it easier for new farmers to get the funds and practical business advice they need
- helps reduce the financial burden of loans for new farmers
- provides one-on-one business counselling and training in support of effective business planning and of awareness of the regulatory environment for agriculture activities

Select Nova Scotia

This successful provincial marketing program, launched in 2007, promotes local food products by increasing consumer awareness and making local products easier to identify.

POTENTIAL BENEFITS:

- improves identification and awareness of Nova Scotia food products
- increases domestic consumption and industry opportunities for Nova Scotia food products
- promotes the benefits of eating and buying locally

ThinkFARM

Through this program, the province provides a resource for new farmers to help start their businesses. The ThinkFARM website provides a one-stop location for information.

POTENTIAL BENEFITS:

- facilitates access to information, programs, services, and regulations that apply to farm businesses
- puts farmers in touch with experts and conducts and supports outreach and training activities to improve the knowledge and skills of beginning and transitioning farmers

Solid Waste Diversion Initiatives

Diverting waste from disposal not only protects the environment but also increases economic activity and creates jobs. Good examples include food waste being turned into compost, paper products being recycled into insulation, asphalt shingles turned into roads and energy, and tires converted to tire-derived aggregate for use as lightweight fill. In these cases and more, Nova Scotia municipalities, educational institutions, businesses, and individuals have stepped up to innovate and to create local jobs and economic opportunities.

A recent specific example of organizations coming together to divert even more waste from landfills and create economic activities is the Association for Textile Recycling (**www.afterwear.ca/wp/**). This six-member organization is dedicated to raising awareness about the importance of textile recycling in Nova Scotia. This new collaboration, which began in 2013, collects used clothing to fund social causes and create jobs, but in addition it keeps textile materials out of our landfills.

POTENTIAL BENEFITS:

- reduces the environmental impact of landfill waste — i.e., reduces contamination of water, land, and air
- reduces municipal cost pressures through policies that ensure the generators pay to divert difficult-to-collect and recycle packaging and other end-of-life products
- stimulates economic activity and job creation
- reduces greenhouse gas emissions
- increases funding to charities that divert textiles and footwear
- increases ability to market our private sector solid waste expertise to the international community
- increases research and development activity to maximize diversion and minimize costs

Land Asset Management

Between January 2011 and May 2013, the province completed a Land Asset Management Pilot Project to investigate ways to improve decisions made about the use of Crown land. The project focused on promoting agricultural development (maple sugar) and wind-energy conversion opportunities on Crown land. As a result of this work, there is now a more streamlined leasing policy for economic activities on Crown land, while still protecting this natural resource for the future.

Since the conclusion of the project, industry stakeholders have asked for continuation of this proactive approach to land asset management. In order to meet this interest, as well as any expectations, the plan is to continue to promote and work on proactive land asset management planning projects.

POTENTIAL BENEFITS:

- supports sustainable development and stewardship of the province's land resources
- increases revenue generation and economic development on the land
- promotes more sound and effective decisions concerning the use of land assets
- increases coordination and accessibility of land asset information

Western Crown Land Planning Process

Since December 2012, the province has been working on a planning process for Crown land located in western Nova Scotia (including the land purchased from Bowater Mersey Ltd). Following consultation, a conceptual plan was released in March 2013. This plan will guide the economic, environmental, and social benefits from more than 80 per cent (1.5 million acres) of the province's western lands.

The plan is a living document, one that is continually updated. The department will review it while seeking future improvements in managing the western Crown lands. The planning will become progressively more detailed as the focus moves from the strategic level to the development of regional plans and then to the more detailed operational plans that guide specific local activities.

POTENTIAL BENEFITS:

- creates jobs and sustainable employment
- promotes stewardship of land for future generations
- uses land in a way that reflects community and local needs and aspirations, as well as economic, environmental, and conservation objectives
- increases collaboration between government, the private sector, citizens, Mi'kmaw people, stakeholder groups, and communities

Inland Fisheries Initiatives

The province manages its freshwater fishery resources. Through resource management programs, services and initiatives, and through regulations and licensing, the resources will be sustained for present and future use.

POTENTIAL BENEFITS:

- supports initiatives such as the Nova Scotia Sport Fish Habitat Fund for projects that improve freshwater habitat and access to the resource (last year, 228,000 square metres of stream habitat restored)
- offers a wild Atlantic Salmon Enhancement Program that supplements indigenous salmon populations and allows for a limited catch-and-release recreational fishery, in addition to a First Nations food, social, and ceremonial fishery

- upholds live-fish-possession regulations that target the transport of live fish in Nova Scotia and that protect the diversity of the province's water bodies by preventing illegal introductions of aquatic invasive species
- creates or maintains jobs, and thus supporting economic prosperity, while protecting the environment

Nova Scotia Flood Mitigation Framework

The Flood Mitigation Framework identifies 10 actions aimed at reducing the impact of flooding in vulnerable Nova Scotia communities. The 10 actions focus on providing support for communities and improving provincial leadership. Progress is overseen by the Interdepartmental Flood Mitigation Framework Committee and reported on annually.

An example of one of the 10 actions is the Flood Risk Infrastructure Investment Program (FRIIP), which is one of three funding programs under the Provincial Flood Mitigation Framework. Announced in April 2013, the 2013–2014 FRIIP was a pilot project in the Truro/Colchester area. The program supports capital projects in which municipalities invest in infrastructure that reduces flood risks and community vulnerability.

POTENTIAL BENEFITS:

- reduces risk of flooding to residents, businesses, and infrastructure
- improved communication with communities and residents regarding flood risks and potential impacts
- improved coordination of provincial action to reduce flood risks
- long-term cost savings through adaptive management
- safer and sustainable communities

Provincial Capital Assistance Program

The province recognizes that the cost of undertaking core municipal infrastructure projects (i.e., those pertaining to water supply, wastewater collection and treatment, and solid waste management) can place significant financial burdens on municipal governments. The Provincial Capital Assistance Program (PCAP) is designed to enable the province to contribute financially towards the cost of high-priority municipal infrastructure projects, so that the burden might be reduced to an affordable level.

POTENTIAL BENEFITS:

- supports upgrades to core infrastructure that creates safe, sustainable, and vibrant communities
- addresses immediate and high-risk concerns to protect public health and the environment

Municipal Climate Change Action Plans

Each municipal climate change action plan (MCCAP) identifies climate-related impacts and issues that have the potential to damage communities and cause a wide range of economic hardships. The MCCAPs set out a priority-based approach to address the identified issues.

POTENTIAL BENEFITS:

- identifies within each plan critical elements of communities that are vulnerable and at risk
- enables local governments to take proactive, adaptive actions designed to reduce both impacts and associated damages

Clean Technology Fund

The fund, which is structured as an early-stage venture capital fund, opened in September 2011. The fund supports the development, demonstration, commercialization, and implementation of innovative clean technologies. For this report period, from April 1, 2012 to April 1, 2014, Innovacorp, through the Clean Technology Fund, invested approximately $3.5 million in four promising early-stage clean technology companies. This investment contributes to the growth of the clean-tech sector and supports the development of new products for the benefit of Nova Scotians.

POTENTIAL BENEFITS:

- helps to grow the clean-tech sector, encouraging innovative, highly-skilled jobs
- supports the development of new products for the province and for export

Sustainable Procurement

This policy outlines procurement practices for government to look beyond the lowest cost and consider the economic, environmental, and social impact of our procurement.

POTENTIAL BENEFITS:

- provides better overall value from government procurement
- increases local and community benefits from government procurement
- reduces environmental impact for government operations
- improves workplace safety for government staff
- improves the ability of local businesses to understand sustainable procurement requirements

Letter from the Round Table

November 5, 2014

Hon. Randy Delorey
Minister of the Environment
Halifax, Nova Scotia

Dear Minister Delorey,

On behalf of my colleagues on the Round Table on the Environment and Sustainable Prosperity, I am pleased to submit this letter assessing progress in implementing the Environmental Goals and Sustainable Prosperity Act (EGSPA) during the past two years. We recognize the extenuating circumstances that made it impossible for the Department of Environment (the Department) to issue the required annual progress report (progress report) in 2013 and look forward to a return to annual reports from this point forward. As you know, among its' purposes, the Round Table is required to provide an annual assessment of the progress made by the Provincial Government in achieving the goals and targets set out in the Act. As you are also aware, the Round Table only recently resumed meeting after a gap of nearly a year (while awaiting new appointments) and has been largely focused on your request that we engage around the draft Greener Economy Strategy. Therefore our time to attend to the draft EGSPA report has been limited. That said a number of members provided written comments. An attempt was made to amalgamate and reconcile these comments but it was soon obvious that it would take considerable face to face discussion to seek consensus on some topics. This was not possible as the Round Table could not meet within the time frame available. Therefore this letter presents input only on those matters upon which we found early consensus.

In general, the Round Table is appreciative that successive Nova Scotia governments have continued to support EGSPA and particularly the core intention of the Act, to establish clear goals that foster an integrated approach to environmental sustainability and economic well-being; and work towards continuous improvement in measures of social, environmental and economic indicators of prosperity. That said, while the progress report addresses each

of the Act's specific goals it does not take a broader view to consider, either qualitatively or quantitatively, what progress has been made towards meeting the overarching objective of integrated environmental and economic prosperity. As we are all aware, this is at least an implied theme within the One Nova Scotia (Ivany Panel) Report which urges urgent and concerted action for growth and renewal. The Round Table believes that EGSPA can and should be a foundational element within this effort and that both actions and the annual report should overtly recognize this dimension. We therefore believe that an important aspect of the implementation of EGSPA and the annual report should be evaluation of whether and how sustainable prosperity is actually being achieved through actions associated with the Act with an eye towards tuning and adjusting its goals towards that essential purpose. This general comment applies as well to our comments upon the progress report's discussion of each of the specific goals.

The Round Table appreciates the efforts of the Department and all the other Departments and Agencies that contribute to progress under the aegis of EGSPA, and recognize the effort that was put in compiling this progress report. We also note that the progress report does refer to the Department's consultation with other government departments. Given that the revised (2013) Act more clearly points to close collaboration with the Department of Economic and Rural Development and Tourism (ERDT), we were surprised not to see evidence of more overt active engagement by ERDT in subsequent implementation especially given the more focused attention given to integrated economic and environmental progress.

With regard to specific Goals the Round Table members' submissions did result in some consensus comments.

CLEANER ENERGY (GOALS A-E)

This is an area of notable progress and an example of how EGSPA can play a pivotal role in focusing and accelerating efforts by multiple sectors towards a common provincial objective. We have comments on some of the specifics.

With regard to energy efficiency of buildings, the Round Table appreciates national and provincial progress. The province has nominally achieved the building energy efficiency goals as set out in the amended EGSPA and the Round Table is pleased to see that the progress report indicates an ongoing commitment to updating the Building Code to reflect the latest in emerging building energy efficiency standards. We believe that EGSPA should continue to be a platform to encourage development and implementation of efficient building

standards to further drive and accelerate progress. The original EGSPA included a target that all homes being bought and sold in NS should be required to have an energy rating. A previous Round Table expressed disappointment when this target was reformulated to remove this requirement. We believe that government should consider reinstituting this requirement which would enhance the ability of Nova Scotians to understand the energy performance of prospective home purchases and to incorporate this information in their choices.

We would also like the government to consider other mechanisms to encourage the construction of more efficient new buildings and efficiency retrofits to existing buildings, such as tax credits for homeowners whose dwellings achieve an EnerGuide rating of 80 or greater, or sales tax exemptions for material and equipment used to conserve energy.

The Round Table also recommends that government consider extending efficiency programs to residential home heating with fuel oil. We recognize that such programs could place a disproportionately difficult onus on lower income homeowners which we believe must be considered and mitigated in future programming.

The Round Table also noted the lack of mention of progress and feasibility of program enhancements in the areas of solar or wind energy going forward in relation to goal of increasing renewable energy use.

With regard to sustainable transportation, the Province's efforts to make progress by launching the Choose How You Move: Sustainable Transportation Strategy and some clear commitments to funding (at least $9 million) are notable steps forward. The Strategy recognizes that transportation is a significant (25%) source of provincial GHG emissions with road transportation contributing the bulk of the emissions (70%). As the number of vehicles on Nova Scotia's roadways continues to increase, the importance of efforts to address this particular sector should not be overlooked. Although the Report generally suggests progress there is no explicit information regarding the extent to which the 5 elements and 28 actions outlined in this strategy were advanced. We were glad to learn that Government has funded $2.5 million through NS Moves Grant Program, a three year program predicted to cost 6 million when announced in 2012 even though this amounts to a very modest percentage of the overall Provincial transportation related budget. We propose that the cost-benefits of this program should be assessed towards a decision about whether to continue or expand this program. We further recognize that the topic of sustainable transportation raises a range of interrelated substantive issues including modes and access to transportation, alternative fuel sources, and both GHG and contaminant emissions (among others) all of which merit ongoing investigation and analysis.

The Round Table notes that EGSPA does not include a goal for reductions in emissions from the transportation sector. We recommend that analysis be undertaken to gauge the feasibility of setting a meaningful and achievable goal. We also note that this strategy points to opportunities for innovation and advances toward sustainable transportation options but will require significant financial support to advance some of the most meaningful actions such as expansion of public transit (bus, commuter rail, etc.) to the next level. While these initiatives suggest both employment and environmental opportunities we are not aware of cost-benefit analysis that would underlie a concrete and defensible implementation and investment strategy.

We also believe that Government could point to efforts that can be undertaken in the future to increase active transportation networks across the province, as well as coordinate regional planning for new infrastructure to decrease the use of single occupancy vehicles for commuting. We also encourage expanded active transportation networks, the assessment of the viability of electric vehicle (EV) implementation into both light duty municipal fleets and individual use, and investigation of other opportunities for connectivity between sustainable transit options beyond our urban cores.

Regarding renewable energy, we commend the Government and our private sector on substantive progress on renewable targets even while we continue to call for critical evaluation of the costs and benefits associated with these initiatives. The Report features progress on the Maritime Link but does not comment on the growth of installed or planned wind energy or prospects for the integration of affordable and reliable renewable electricity to Nova Scotia's grid and both short-term and long-term energy storage technology and smart grid innovations. The Round Table is encouraged by government's support for the research and development of these technologies. We note however that

the Report does not reference solar energy in the 'What's Next' section even though our province has considerable solar energy potential and can point to Halifax's Solar City initiative as a successful pioneering initiative that may be replicable in other regions.

Round Table members hold diverse and divided opinions on the viability and appropriateness of including large-scale forest biomass as a component within the province's renewable energy mix.

CLIMATE CHANGE (GOAL F)

The report suggests that it is likely that the province will achieve the goal that greenhouse gas emissions are, by 2020, at least 10 per cent below the levels that were emitted in 1990. The province should undertake a substantive evaluation of what effect this achievement has had upon the environment and economy with attention to holistic indicators of prosperity and in the next review of EGSPA, should consider updating this goal accordingly. Some Round Table members support evaluation of the viability of increasing targeted reduction from 10% to 15%.

We would also like to address the opportunity to pair this mitigation goal with complementary climate change adaptation goals. Although the province has listed the above 10% GHG emissions reduction goal under the heading of, "adapting to and mitigating the impacts of climate change", it speaks directly only to the issue of mitigation. In the next round of EGSPA review, the province should consider the introduction of goals that address adaption to a changing climate. It was also suggested that completion of the Nova Scotia Coastal Strategy would be an asset in supporting progress on climate change adaptation.

We recognize that one of the factors that contributed to progress towards the GHG reduction goal was the closure of two pulp mills. Therefore we should be cognizant that opportunities for this industrial sector to recover would likely be accompanied by an increase of these emissions. Further, we are aware that other potential industrial developments, such as LNG facilities (given that extracting, processing, transporting and liquefying natural gas are all energy intensive processes that release greenhouse gases), may have significant consequences regarding GHG emissions. These factors should be closely evaluated in determining policy towards these developments.

Healthy Air and Water (Goals g-n)

Regarding the Canada Wide Standards for Particulate Matter (PM) and Ozone established by the Canadian Council of Ministers of the Environment (CCM) for ground-level ozone by 2010, the Round Table is concerned that the province has noted that both of these goals are achieved when the only data provided concerns the two largest urban centres in Nova Scotia. In the case of airborne fine-particulate matter there is only data for HRM and estimates from CBRM. Historically, it is Nova Scotia's rural areas that have hosted much of the industry that generates these emissions. For example, there is no mention of the monitoring sites in the Annapolis Valley which have periodically exceeded the

Canada-wide standard for ground-level ozone. The Pictou area has also been experiencing above normal levels. Measures taken to overcome these deleterious levels (if any) should be outlined. It is also noted that the CCM has updated the standards for ground ozone and airborne fine particulate matter. It is not clear if the province is working towards meeting these new standards.

The Round Table notes that it has been four years since release of Water for Life: Nova Scotia's Water Resource Management Strategy. We are interested to learn what the province has implemented and achieved towards the commitments and objectives of this Strategy as the creation of strategies themselves are not the ultimate objective of EGSPA. In this case we do not believe that the EGSPA goal can be considered fully "achieved" if the province's drinking water remains at risk. Based upon an assessment of progress achieved and the costs-benefits of doing so the Province can determine the next steps towards advancing this Strategy as well as additional or refined goals that would serve the purposes of the Act such as consideration of the introduction of requirements for riparian buffers and setbacks as a means of further protecting the quality of provincial water resources. In 2014, the NS Auditor General found that although municipal systems, supplying drinking water to approximately 60 per cent of the province's population, are generally meeting NS treatment standards the remaining 40 per cent of the province's population, either on a private water supply (e.g., individual home) or on one of approximately 1600 registered water supply systems (systems that provide drinking water to at least 15 service connections or serves 25 or more individuals per day for at least 60 days of the year) were still vulnerable to water quality deficiencies. These registered systems are critical pieces of the rural green economy; accordingly efforts are required to ensure safe water for tourists, rural communities and other people relying on drinking water from registered systems. Funding support from provincial and federal levels of government is a critical issue for municipalities in the areas of drinking water and wastewater. Provincial government needs to consider existing and new regulations and their fiscal impact on municipalities. New regulations need to have measurable outcomes and be regularly reviewed for efficiency and effectiveness. This should be done in collaboration with municipalities early in the process of regulation development.

LEADERSHIP IN SUSTAINABLE PRACTICES (GOALS O-U)

The topic of solid waste raised a number of issues which the Round Table would like to spend time considering in the coming year. We noted that solid waste generation per capita has remained basically the same between 2008 (378 kg) and 2013(373 kg). This goal presents significant challenges for Nova Scotia. While the province has had marked success in achieving world-leading waste diversion

rates, progress toward the 300 kg per capita limit has been slower than needed to achieve the target within the legislated timeframe. We also recognize that there are a variety of views regarding the most opportune, equitable and feasible approaches to future programs or regulations.

With regard to local food production and consumption, the Round Table believes the province is moving in the right direction by adopting a systems approach that will help ensure greater consistency across departments. Despite overall progress, recent closures within food processing sectors point to one of the province's major challenges – to develop and support rational locally focused processing patterns in the face of continuing industry consolidation. Growing the number of farms requires programs and initiatives that will support and promote the value of higher quality local food alternatives. Farming is a valuable sector in need of support and a potentially rewarding vocation for our youth, even though most are growing up with a greater degree of dissociation from the processes of farming and food production. Reversing this trend might entail formal support structures, loan programs, and encouragement to farming in the education system. Such programs and initiatives should be evaluated holistically. Progress towards achieving expanded local food production could also be supported by progress related to the Sustainable Procurement Goal q – by extending procurement targets to include food procurement by provincial institutions.

Although the province has achieved Goal r- the construction of an energy efficient demonstration facility, the Round Table suggests that the 'What's Next' section should point to what the province can do to improve sustainability of its current buildings. While the province is making strides by incorporating green building practices for new buildings, we recommend it seek to improve the sustainability of its existing building assets by undertaking energy and water conservation retrofits and, where practicable, incorporating technologies such as green walls and solar photovoltaics.

Regarding Goal s, development of a greener economy strategy, the Round Table as noted has been engaged in facilitating recommendations towards refinement of this strategy. However this process has been extremely time-constrained. We therefore strongly recommend that the upcoming strategy release should be followed by an assertive ongoing process of evaluation, refinement and improvement so that it can be further improved. We also believe that as other provincial departments engage in their ongoing policy and program reviews that a greening the economy lens is integrated as an important indicator that government is fully engaged in this important process.

PROTECTION OF BIODIVERSITY (GOAL V)

The province reports that it is on track to achieve protection of 13% its total land mass by 2015. This is a notable achievement however there is no mention of the "conditional lands" that are committed to move us towards 14% protection by 2020. It is our understanding that some of these areas have already met their "conditions" (e.g. expiry of mineral exploration licenses) and should be proceeding to designation.

SUSTAINABLE MANAGEMENT OF NATURAL ASSETS (GOALS W-Y)

Regarding Goal x, release of a Wetlands Conservation Policy, and Goal y, the adoption of a Natural Resources Strategy, the Round Table believes as per other strategic initiatives that the intent of these Goals were to first create a policy and then make steady progress towards their implementation even as Government undertakes to evaluate the costs and benefits of implementation and to further improve the strategies toward their underlying objectives. In the case of the Natural Resources Strategy, government has released a 24 month progress report. Nonetheless, Round Table members have various perspectives on assessments of progress being made, and on the future course and refinement of these strategies which we expect will be topics for future consideration.

OVERALL SUMMARY COMMENTS

The Round Table believes that the progress report would be enhanced by the inclusion of a "Looking Forward" section at the end of the report that lists, perhaps in table format, the work to be done on each of the goals, the status of programmatic evaluations and consideration of revised goals and targets. The progress report could highlight how EGSPA will continue to be influential once its targets are met and how EGSPA will be integrated with the Greener Economy Strategy.

As previously suggested periodic review mechanisms are critical to the success of this Act which would evaluate the efficacy of initiatives, their contribution to both environmental and economic progress and provide the basis for course corrections that would enhance the ability of this legislation to reflect and respond to changing needs and circumstances. This is also relevant to 'achieved' goals and targets. While the government notes in the "Next Steps" sections of the progress report a number of actions that it intends to take to continue to advance the achieved goals, these steps are not bolstered by clear targets

and timelines in the same way as the original goals. We are concerned that they are therefore susceptible to variable levels of commitment due changing government policy and resources. Instead, progress must be discerned by reference to the various parts of government with responsibility for the respective items. This makes it more difficult for stakeholders to monitor and comment on government's progress on some specific areas of activity.

The next review is also a key opportunity to ensure alignment between EGSPA and the forthcoming Greener Economy Strategy. We would like to see an integrated approach to these measures reflected in next year's report.

The Round Table is appreciative of the opportunity to consider and respond to the annual Progress Report on EGSPA. As noted above circumstances this year limited our time to undertake a thorough review process. Therefore we strongly recommend that in future years a more adequate time period is available. We look forward to our continued ability to contribute to the imperative of our province's sustainable prosperity future.

Yours sincerely,

Martin W. Janowitz
Chair